European Committee on Antimicrobial Susceptibility Testing (EUCAST)

Minutes of the General Committee Meeting on 12 May 2014 at 24th European Congress of Clinical Microbiology and Infectious Diseases, Barcelona, Spain

A list of attendees who signed the register is attached.

1. Apologies for absence
   None.

2. Minutes of meeting in Berlin, 29 April 2013
   With minor corrections, the unratiﬁed minutes were approved as a true record.

3. Matters arising
   None.

4. EUCAST Steering Committee membership
   4.1 The current membership of the Steering Committee is attached.
   4.2 Rafael Canton reported that Claude-James Soussy had retired as the CA-SFM representative (France) and his place taken by Luc Dubreuil. Luc Dubreuil will also retire early in 2015 and his place will be taken by Francois Jehl. The terms of membership of Robert Skov (Denmark) and Luis Martinez-Martinez (Spain) will ﬁnish at this meeting and Jan Verhaegen (Belgium) and Iztok Strumbelj (Slovenia) will take over as representatives of the General Committee after this meeting. Claude-James, Robert and Luis were thanked for their signiﬁcant contributions to the work of the committee.
   4.3 Up to two additional “visiting” General Committee members may now attend each Steering Committee meeting by prior agreement. Three visiting members have attended Steering Committee meetings in the past year.
   4.4 Rafael Canton reminded the committee that there are now ﬁve annual ECCMID observerships, each with a maximum value of 1000 Euros, to support attendance of visiting members to EUCAST Steering Committee meetings. Applications should be made by email to the Chairman or Scientiﬁc Secretary of EUCAST.

5. EUCAST General Committee membership
   5.1 The up-to-date membership list is on the EUCAST website (the current list is attached). Representatives should inform the Scientiﬁc Secretary (email derek.brown222@btinternet.com) if the representative for their country has changed.
   5.2 The pharmaceutical and susceptibility device manufacturing industries email networks have proved very difﬁcult to maintain as company representatives appear to be very mobile and failure to deliver notices for emails no longer active are very common. Companies should regularly consult the EUCAST website for news and consultations as EUCAST cannot be responsible for ensuring that email lists are current.

6. EUCAST and ECDC
6.1 The current EUCAST contract with ECDC runs until October 2014. The principal EUCAST objectives for ECDC are the harmonization of European breakpoints, establishment of ECOFFs and methodology for antimicrobial resistance surveillance. EUCAST also sets breakpoints for new agents for the EMA and advises EFSA on antimicrobial aspects of food and feed safety.

7. **EUCAST Chairperson’s report**
Rafael Canton summarised activities over the past year.

7.1 **Structure and organisation**
The structure and organisation of EUCAST were reviewed. In the last year there have been five meetings of the Steering Committee. The General Committee meets once a year, at ECCMID.

7.2 **EUCAST National Antimicrobial Susceptibility Testing Committees (NACs)**
National Antimicrobial Susceptibility Testing Committees (NACs) linked to EUCAST have now been established in most European countries and some countries outside Europe, including Australia and the USA. Dr Bob Rennie reported that Canada is in the process of forming a NAC.

7.3 **New breakpoint tables**
7.3.1 Version 4.0 (January, 2014) of breakpoint tables is on the EUCAST website.
7.3.2 The format of the index has been improved, with links to different pages for different groups of organisms and to EUCAST guidance documents, expert rules and the document on detection of resistance mechanisms documents.
7.3.3 There is a page explaining the terminology and links used in the breakpoint tables.
7.3.4 There are new or revised breakpoints for several organisms.
   • Enterobacteriaceae
   • P. aeruginosa
   • S. lugdunensis
   • Enterococcus spp.
   • H. influenzae
   • M. catarrhalis
   • Corynebacterium spp.
   • Amox-clav (uncomplicated UTI only)
   • Ciprofloxacin and *Salmonella* spp.
   • Doripenem
   • Benzylpenicillin
   • Ciprofloxacin, levofloxacin (uncomplicated UTI)
   • Cefaclor (removed)
   • Cefaclor (removed)
   • Several antimicrobials

7.3.5 Some new screen tests have been added.
   • Pefloxacin
   • Norfloxacin
   • Cefoxitin
   • HLAR
   • *Salmonella* spp.
   • Enterococcus spp.
   • *Staphylococcus pseudeintermedious*
   • Viridans group streptococci

7.3.6 Some breakpoint notes have been reworded and some new notes added.
   • Doripenem
   • Benzylpenicillin
   • Benzylpenicillin, penicillinase
   • Clindamycin
   • Gram-negatives
   • Coagulase negative staphylococci
   • Streptococcus groups A, B, C and D
   • Streptococcus groups A, B, C and D
   • *Staphylococcus* spp., *Streptococcus* spp.

7.3.7 There has been some rewording of supplementary tables
   • S. pneumoniae
   • Oxacillin screen
   • H. influenzae
   • Benzylpenicillin 1-unit, β-lactam resistance

7.4 **EUCAST presentations**
7.4.1 At ECCMID this year there has been the annual EUCAST workshop on antimicrobial susceptibility testing, a EUCAST “meet the experts” session on common questions and answers relating to EUCAST breakpoints and methods and many EUCAST-related papers and posters.
7.4.2 There have been multiple presentations by EUCAST representatives at national meetings in Europe and outside, including Australia, Japan, China, Indonesia, Israel, UAE Emirates, Colombia, USA, South Africa and Morocco.
7.4.3 In Linz, Austria in September 2014 there will be an ESCMID Postgraduate Educational Workshop, with lectures and laboratory sessions covering the EUCAST breakpoint setting process, antimicrobial susceptibility testing methods, differences between EUCAST and CLSI, EUCAST expert rules, antimicrobial surveillance systems, epidemiological cut-off values (ECOFFs), and implementation of
EUCAST breakpoints and methodology. ESCMID attendance grants for “young scientist members” are available.

7.5 Implementation of EUCAST breakpoints
An updated map based on a survey undertaken by EUCAST at the start of 2014 shows that EUCAST breakpoints continue to be implemented widely, but to various degrees, in most European countries and some outside Europe. In the UKNEQAS External Quality Assessment Scheme, over 80% of participating laboratories reported that they followed EUCAST breakpoint guidelines. The EUCAST survey also showed that the EUCAST disk diffusion method is increasingly used in most European countries.

7.6 EUCAST website
7.6.1 The EUCAST website is frequently updated with new and revised documents and data. Gunnar Kahlmeter pointed out that there is a link at the bottom of the index on the home page to a table of website changes, where all website changes are recorded. All EUCAST documents can be freely downloaded from the website. In addition to the new breakpoint tables a few points were highlighted.

7.6.2 The principal EUCAST documents are now available in several languages. Translations are done by the respective NACs, which are responsible for updating the documents when updates to the English versions are released.

7.6.3 The website file of frequent questions and answers related to EUCAST has been reviewed and many answers updated.

7.6.4 The website is heavily used, with around 50000 visitors per month, with 60% from Europe.

7.7 EUCAST documents and publications
7.7.1 Three new Standard Operating Procedures (SOPs) have been released on the EUCAST website:
- SOP 4.1 EUCAST Committees and subcommittees.
- SOP 6.0 Organisation and maintenance of EUCAST website.
- SOP 7.0 Preparation and handling of EUCAST minutes.

7.7.2 About 50 rationale documents are now available on the website.

7.7.3 EUCAST publications in scientific journals were as follows:

7.7.4 EUCAST-related publications have increased steadily in recent years and in 2013 there were around 90 publications listed in PubMed mentioning EUCAST in the title or abstract.

7.8.1 What is coming in 2014-1015?
- Breakpoints set through the EMA process for new agents including ceftobiprole, β-lactam-β-lactamase inhibitor combinations, macrolides, tetracyclines, glycopeptides, oxazolidinones, delamanid and other antimycobacterial agent.
- Colistin breakpoint revision in collaboration with CLSI (under the TATFAR initiative).
- Harmonised breakpoints for temocillin, nitro WXine and spiramycin.
- Review of tigecycline and aztreonam breakpoints.
- Review of ciprofloxacin breakpoints for N. meningitidis.
- Review of various antimicrobial breakpoints for N. gonorrhoeae.
- Assessment of daptomycin breakpoints for enterococci.
- Listing of organisms-agent combinations lacking clinical data supporting breakpoints.
- New and revised rationale documents.
- New version of expert rules (v3).
- Guidance/discussion documents (e.g. dissociated clindamycin resistance).
- New SOPs.

8. EUCAST subcommittee reports
8.1 Antifungal Susceptibility Testing Subcommittee (AFST)
Maiken Cavling Arendrup, the subcommittee chairperson, presented a summary of activity of the subcommittee over the past year. Membership of the subcommittee is attached.
8.1.1 The structure of the AFST Steering Committee has been reorganised to ensure that there is a core of members with expertise but also some rotation of members. The AFST Steering Committee is now comprised of a Chair and a EUCAST Steering Committee representative, both appointed by the EUCAST Steering Committee for a three year period (can be reappointed), a Secretary and a Data Manager, both appointed by the EUCAST Steering Committee in collaboration with the AFST Chair for a three year period (can be reappointed) and two country representatives, appointed by the EUCAST Steering Committee in collaboration with the AFST Steering Committee for a two year period (preference is given to representatives of countries not previously represented on the AFST Steering Committee).

8.1.2 New itraconazole breakpoints for Candida spp. are currently under consideration.

8.1.3 A technical note was published in CMI on voriconazole for Aspergillus spp.; and a note is in press in Mycoses on anidulafungin, fluconazole and micafungin for Candida spp.

8.1.4 The EUCAST definitive document “Method for the determination of broth dilution minimum inhibitory concentrations of antifungal agents for conidia forming moulds” has been revised and the new version E.Def 9.2 has recently been released on the EUCAST website.

8.1.5 Areas requiring further work include:
- Aspergillus and isavuconazole rationale document. MICs are being collected for ECOFF and breakpoint determinations.
- For Aspergillus and azoles a new document on the agar screening method is being developed.
- For Aspergillus echinocandin testing there are methodological issues and a protocol is under development.
- Systematic revision of existing documents three or more years old is required.
- Missing QC ranges are to be established.
- Remaining breakpoints to be established.
- Candida and topical agents.

8.1.6 All AFST documents are in the revised AFST section on the EUCAST website.

8.1.7 In response to questions Maiken Cavling Arendrup confirmed that there is a reference MIC method for yeasts and is available from the EUCAST website. It was also noted that there has been no evaluation of commercial tests against the EUCAST reference method and this was not within the EUCAST remit. There may be issues with commercial systems if they are calibrated to the CLSI rather than the EUCAST reference method.

8.2 Subcommittee on methods for detection of resistance mechanisms of clinical and/or epidemiological importance


8.2.2 The document covers acquired carbapenemases in Enterobacteriaceae, extended-spectrum β-lactamase producing Enterobacteriaceae, acquired AmpC-producing Enterobacteriaceae, methicillin-resistant S. aureus, vancomycin low-level resistance in S. aureus (VISA/heteroVISA), vancomycin-resistant enterococci and penicillin non-susceptible S. pneumoniae.

8.2.3 It was noted that these pan-European guidelines need scrutiny and constructive feedback from national methodology committees to ensure that the guidelines are improved over time. European standardization will be helpful for the EARS-Net resistance surveillance programme, but even more so for laboratories, patients and infection control.

9. The EUCAST disk diffusion method
A summary was presented by Erika Matuschek, from the EUCAST Development Laboratory, Växjö, Sweden.

9.1 Development of the EUCAST disk diffusion method continues.

9.2 New zone diameter breakpoints have been added for Enterobacteriaceae (amoxicillin-clavulanic acid in uncomplicated UTI), Salmonella spp. (pefloxacin screen to detect ciprofloxacin resistance, described in ECCMID posters P279 and P285), Staphylococcus spp. (benzylpenicillin for coagulase-negative staphylococci and S. lugdunensis, and cefoxitin screen for S. pseudintermedius), Enterococcus spp. (ciprofloxacin, levofloxacin and norfloxacin screen for uncomplicated UTI, described in ECCMID poster P282), and Corynebacterium spp. (described in ECCMID poster P280).
9.3 Doripenem resistant breakpoints have been adjusted for Enterobacteriaceae, Pseudomonas spp., and Acinetobacter spp.

9.4 Zone diameter breakpoints have been revised for Enterobacteriaceae and amoxicillin-clavulanic acid for systemic infections, for S. saprophyticus and ampicillin, and for Pseudomonas spp. and several β-lactam agents (described in ECCMID poster P283).

9.5 Several inter-laboratory studies have been coordinated by the EUCAST Development Laboratory, with 5-13 laboratories per study, in the following areas:
   • Testing of inducible clindamycin resistance in staphylococci and streptococci by the “D-test”.
   • Reproducibility of ceftaroline susceptibility tests by disk diffusion and gradient tests.
   • Retapamulin gradient MIC tests (described in ECCMID poster P281).
   • Pefloxacin disk screen test for Salmonella spp. (described in ECCMID posters P279, P285).
   • Validation of QC ranges for new agents.
   • Inter-laboratory variation for new agents vs. clinical isolates.

9.6 Ongoing studies include establishment of disk contents for new agents, MIC-zone diameter correlates for new agents, zone diameter breakpoints for agents with “in preparation” in the breakpoint tables (e.g. fosfomycin), organisms with no method or disk diffusion breakpoints (e.g. anaerobes and N. gonorrhoeae), quality control ranges for new agents and organism-agent combinations without current control ranges, and broth microdilution studies on a wide range of organisms.

9.7 From 1 September 2014 a broth microdilution MIC service will be available from the EUCAST Development Laboratory, Växjö, Sweden.

9.8 Gunnar Kahlmeter noted that recent studies showing differences in disk content between manufacturers would be published without naming the manufacturers. All manufacturers have been informed of the results with their disks and the study would be repeated in the next year with the intention of then publishing results with manufacturers named. There was some discussion regarding whether manufacturers should be named.

10. **Compliance of manufacturers of materials for AST by EUCAST methods**
10.1 The file on the EUCAST website recording manufacturers’ compliance for EUCAST breakpoints and methods has again been updated. It was noted that the data in these tables are not verified by EUCAST and inclusion of commercial products does not indicate endorsement by EUCAST.

11. **Any other business**
11.1 None.

12. **Next meeting of the EUCAST General Committee**
    Scheduled for 25th ECCMID, Copenhagen, Denmark, 24-28 April 2015.
EUCAST General Committee Meeting attendees signing the register, 12 May 2014

Jenny Åhman        Sweden
Maiken Cavling Arendrup  Denmark
Fabio Brocco        Liofilchem
Derek Brown         UK
Iva Butic            Croatia
Samantha Cain       Thermofisher Scientific
Rafael Canton       Spain
William Craig        USA
Christian Giske      Sweden
Andrea Gough        Thermofisher Scientific
Hakan Hanbergen     Sweden
Ron Jones            JMI Labs
Manette Juvin        Bio-Rad
Gunnar Kahlmeter     Sweden
Greeta Kampinga      Netherlands
Onur Karatuna       Acibadem Turkey
Yoram Keness        Israel
Laura Koeth         Laboratory Specialists Inc
Katalin Kristof     Hungary
Brandi Limbago      CDC, USA
Christoffer Lindemann  Norway
Maureen Mansfield   Thermofisher Scientific
Erika Matuschek     Sweden
Sally Maysent       Thermofisher Scientific
Steve Michalik      bioMérieux
Linda Miller        GSK
Jos Monen            Netherlands
Johan Mouton        Netherlands
Milan Niks           Slovakia
Kaisu Rantakokko-Jalava  Tykstrab, Finland
Bob Rennie          Canada
Jorge Sampaio       Brazil
Alisa Serio         Archaogen, USA
Dee Shortridge      bioMérieux
Martin Steinbakk    Norway
Greg Stone          Astra Zeneca Pharma
Iztok Štrumbelj      Slovenia
Marina Sukhorukova   Russia
Silva Tafaj         Albania
John Turnidge       Australia
Thierry Vidalenc    Bio-Rad Laboratories
Christine Walton    UK NEQAS
Reinhard Zbinden    Switzerland
EUCAST Steering Committee 12 May 2014

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<th>Position</th>
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<td>Chairperson</td>
<td>Dr Rafael Canton</td>
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<td>CA-SFM</td>
<td>Prof Claude-James Soussy/ Prof Luc Dubreuil</td>
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EUCAST General Committee 12 May 2014

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National representatives

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<td>FESCI</td>
<td>Dr David Livermore</td>
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EUCAST subcommittees

Antifungal Susceptibility Testing Subcommittee

Steering Committee
Maiken Cavling Arendrup, Denmark (Chairperson)
Susan Howard, UK (Secretary)
Joseph Meletiadis, Greece (Data Coordinator)
Manuel Cuenca-Estrella, Spain (NAC representative)
Cornelia Lass-Floeerl, Austria (NAC representative)
Johan Mouton, The Netherlands (EUCAST Steering Committee Representative)

Full Committee members
Maiken Cavling Arendrup, Denmark (Chairperson)
Susan Howard, UK (Secretary)
Joseph Meletiadis, Greece (Data Coordinator)
Manuel Cuenca-Estrella, Spain
Cornelia Lass-Floeerl, Austria
Johan Mouton, The Netherlands (EUCAST Steering Committee Representative)
S Arikan-Akdagli, Turkey
F Barchiesi, Italy
J Bille, Switzerland
E Chryssanthou, Sweden
P Gaustad, Norway
A Groll, Germany
P Haml, Czech Republic
H Järv, Estonia
P Koukila-Kähkölä, Finland
K Lagrou, Belgium
O Lortholary, France
N Klimko, Russia
T Matos, Slovenia
C Moore, UK
A Velegraki, Greece
P Verweij, The Netherlands

Subcommittee on methods for detection of resistance mechanisms and resistances of clinical and/or epidemiological importance
Christian G. Giske (Chairperson; Sweden, EUCAST and EARS-Net)
Luis Martinez-Martinez (Spain and EUCAST)
Rafael Canton (Spain and EUCAST)
Stefania Stefani (Italy)
Robert Skov (Denmark and EUCAST)
Youri Glupczynski (Belgium)
Patrice Nordmann (France)
Mandy Wootton (UK)
Vivi Miriagou (Greece)
Gunnar Skov Simonsen (Norway and EARS-Net)
Helena Zemlickova (Czech republic and EARS-Net)
James Cohen-Stuart (Netherlands)
Marek Gniadkowski (Poland)